

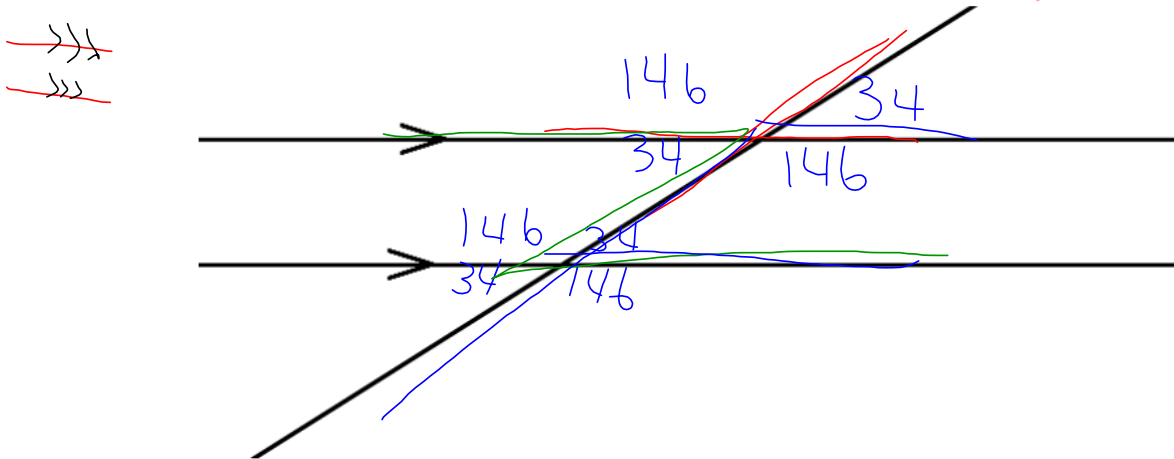
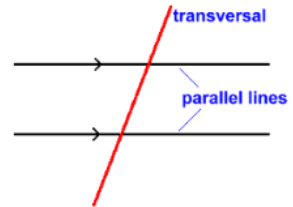
MPM1D

7.1b Transversal Theorem

Date: \_\_\_\_\_

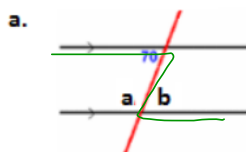
- In angle geometry parallel lines are denoted by arrows which run through the lines.
- A line which runs through parallel lines is called a transversal

Measure the 8 angles in the transversal below and record the value of each angle measured.



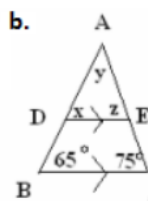
Alternate Angles Transversal parallel line theorem TPTZ - "Z" pattern	Corresponding angles Transversal parallel line theorem TPTF - "F" pattern	Interior angle theorem Transversal parallel line theorem TPTC - "C" pattern $x + y = 180$

Find the value of the unknown variables:



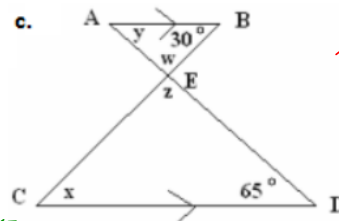
"2" tells us  $b = 70^\circ$

"c" tells us  $a + 70 = 180^\circ$   
 $a = 110^\circ$



"F"  
 $x = 65$   
 $z = 75$

$y = 180 - 65 - 75$   
 $= 40$



$y = 65$   $x = 30$   
 $w = 65$   
 $z = 85$

Homework: Complete Worksheet #1-3